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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,626	12/05/2003	Donald J. Desbiens	112055-0065U	1107

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EXAMINER	
PARSONS, THOMAS H	

ART UNIT	PAPER NUMBER
1745	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/729,626	DESBIENS, DONALD J.	
	Examiner	Art Unit	
	Thomas H. Parsons	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

The pages of the instant application are numbered as follows: 1, 2, 3, 2, 3, 4, and 5, Suggest renumbering the pages,

First Page 2 , line 16, suggest changing "if" to --is--;

Second Page 2, line 7, the text "...is then configured contact..." appears awkwardly worded;

Second Page 3, line 11, suggest changing "contains" to --contain--

Appropriate correction is required.

Claim Objections

2. Claims 1 and 6 are objected to because of the following informalities:

Claim 1, lin3-4, the text "...for gases to flow and a voltage signal and defines a voltage signal." appears awkwardly worded; and,

Claim 6, lines 3 and 4, the text "...contact points corresponding the first contact..." appears awkwardly worded.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Marsh (6,312,846).

Claim 1: Marsh in Figures 1, 2, 8, and 9 disclose an integrated power system constructed on a single chip, the integrated power system comprising:

at least one fuel cell (12) built on the chip (10) defining channels (50A, 50B) for gases to flow and a voltage signal and defines a voltage signal (col. 1: 24-59 and col. 2: 40-53),

means for accepting fuel cell gases into the channels (col. 2: 55-60),

a power converter (94) that accepts the voltage signal from the fuel cell and converts that voltage into a second output voltage suitable for use in electronic systems (col. 6: 1-4 and 25-45),

a fuel cell controller (94, 88) that regulates the gases flowing into and/or through the at least one fuel cell, wherein the gas flow corresponds to a power output of the at least one fuel cell (col. 6: 7-8),

means for detecting the power delivered via the second output voltage and providing a feedback signal corresponding thereto (col. 6: 46-53),

means for connecting the signal to the fuel cell controller, wherein the fuel cell controller is responsive to the feedback signal to meet the power delivered (col. 6: 46-53). See also col. 1: 24-63, col. 2: 40-61, col. 5: 46-col. 6: 65 and col. 8: 13-29.

Claim 2: Marsh in Figure 8 discloses means for measuring the temperature (80) and pressure (86) of the flowing gases and for communicating the measurements to the integrated power system (col. 5: 52-65).

Claim 3: Marsh in Figure 2 discloses that the integrated power system defines two sides of a chip, the first side being where monolithic structures are built and interconnected and a second side of the chip defining the substrate (14), and further where the power converter comprises power transistors that deliver current via the second output voltage (col. 6: 24-32).

Claim 6: Marsh in Figure 2 discloses that at least part of the power converting, conditioning and controlling functions are constructed on at least one assembly defining first contact points, and wherein the chip defines contact points corresponding the first contact points, such that the at least one assembly can be mounted onto the chip and electrical connections made between the chip and the at least one assembly See also col. 1: 24-63, col. 2: 40-61, col. 5: 46-col. 6: 65 and col. 8: 13-29.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 4, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh as applied to claims 1 and 3 above, and further in view of Applicant's Background section.

Marsh is as applied, argued, and disclosed above, and incorporated herein.

Claims 4 and 5: Marsh does not disclose power transistors are integrated into the chip and connections thereto are made on the first side of the chip or power transistors are integrated into the chip and connections thereto are made on both the first and the second sides of the chip.

The Applicant on (second) page 3, lines 20-24 discloses such assemblies, construction and integration techniques are well known in the art.

Claim 7: Marsh does not disclose power converting functions comprising a switching mode type circuitry.

The Applicant on (first) page 3, lines 50-54 discloses power converting functions comprising a switching mode type circuitry are known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the integrated power system of Marsh by incorporating known integrated power transistors and connections, and switching mode type circuitry because the Applicant teaches known integrated power transistors and connections, and switching mode type circuitry that would have provided a smaller, lighter and faster electrical energy source thereby improving its overall performance of portable computing and communications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas H. Parsons whose telephone number is (571) 272-1290. The examiner can normally be reached on M-F (7:00-4:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas H Parsons
Examiner
Art Unit 1745

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PATRICK JOSEPH RYAN
SUPERVISORY PATENT EXAMINER